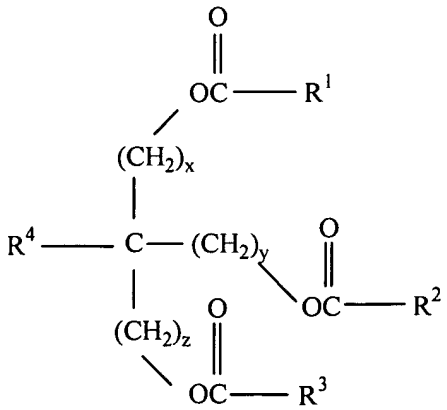
REMARKS

Claims 1-5 and 9-14 are pending in this application. By this Amendment, Claim 1 has been amended, Claims 13 and 14 has been cancelled and new Claim 29 has been added. Support for amended Claim 1 can be found throughout the specification, e.g., page 5, line 7 through page 6, line 8 and in Claim 14. Support for new Claim 29 can be found throughout the specification, e.g., page 5, line 7 through page 6, line 8 and page 18, lines 1-11. Applicants respectfully submit that no new matter has been added to this application nor have any new issues been raised by these amendments. Moreover, it is believed that the amendment to the claims as presented herein places the application in condition for allowance or in better form for consideration on appeal, if one becomes necessary.

In the last Office Action mailed November 30, 2006, the Examiner finally rejected original Claims 1-5 and 9-14 under 35 U.S.C. §102(b) as being anticipated by Culpon Jr. U.S. Patent No. 5,151,205 ("Culpon").

In contrast to the presently claimed invention, Culpon fails to disclose a lubricating oil composition within the scope of amended Claim 1, comprising, *inter alia*, "a minor deposit-inhibiting effective amount of at least one polyol ester of the general formula



wherein R^1, R^2 and R^3 are independently an aliphatic hydrocarbyl moiety have from 4 to 24 carbon atoms, R^4 is hydrogen or an aliphatic hydrocarbyl moiety having 1 to 10 carbon atoms and x, y and z are the same or different and are integers from 1 to 6; wherein the minor deposit-inhibiting effective amount of the polyol ester is about 1 wt. % to about 5 wt. %, based on the total weight of the composition and wherein the composition has a phosphorous content not exceeding 0.08% by weight, and a sulfur content not exceeding 0.2% by weight, based on the total weight of the composition."

In the Advisory Action, the Examiner maintained that

> The FACT of the matter is that Culpon, Jr. claimed lubricating oil compositions meet applicant's claimed phosphorous and sulfur limitations because Culpon, Jr. claimed compositions of claims 1-2 do not contain any phosphorous and sulfur. Even if applicant is correct that Culpon would not have contemplated having any limits on the phosphorous and sulfur content due to governmental regulations and environmental issues, such is totally moot, since Culpon's claimed lubrication oil compositions are free of phosphorous and sulfur, and meet all of applicant's other claimed limitations.

Applicants respectfully disagree. To anticipate, a prior art reference must place the inventive compound or composition in the possession of the public. *In re Brown*, 329 F.2d 1006, 1011, 145 USPQ 245 (C.C.P.A. 1964). Thus, the prior art reference must disclose each and every feature of the claimed invention, either explicitly or inherently. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047, 34 USPQ2d 1565 (Fed. Cir. 1995). At the time of filing the Culpon application, i.e., May 13, 1991, governing regulatory agencies did not have the low phosphorous and low sulfur requirements that exist in the industry today. Thus, even by employing a synthetic oil inherently free of sulfur, phosphorus and metals, Culpon would not have possibly

contemplated claiming a lubricating oil composition having any limits to the phosphorous and sulfur content therein and would have used additives containing high amounts of phosphorous and sulfur. As such, the lubricating oil compositions of Culpon would not possibly place the claimed lubricating oil composition of Claim 1 in the possession of the public.

Moreover, Claim 1 of Culpon is directed to a lubricating oil composition *comprising* (a) major portion of a synthetic base lubricating oil, (b) a solubilizer comprising a trimethylol propane ester of C_6 to C_{12} carboxylic acids; and (c) 2 to 4 wt % of a tackifier comprising a polybutene polymer of molecular weight 100,000 to 1,000,000. The term "comprising" is an open ended term which does not exclude *any* component. Accordingly, Claims 1 and 2 of Culpon are not limited to components (a)-(c) as recited therein and therefore embrace a lubricating oil composition having a phosphorous content exceeding 0.08% by weight, and a sulfur content exceeding 0.2% by weight, based on the total weight of the composition.

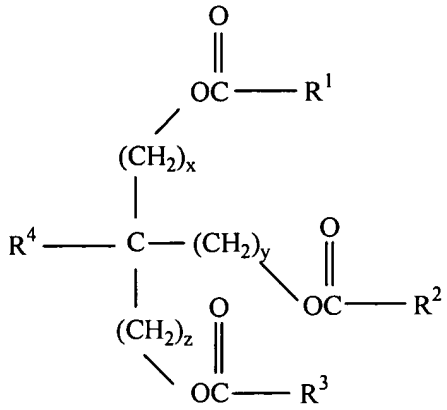
In addition, Culpon specifically discloses in column 4, lines 23-33:

> The lubricating compositions are formulated by methods well-known in the art. .... The base oil and ester oil are weighed and added to a steam jacketed stainless steel kettle at ambient temperature to 150°F, with stirring. Additives are weighed and added. When a homogeneous mixture is achieved, the tackifier is then added gradually, with continuous stirring. This composition is canned and shipped to point of use.

Thus, according to Culpon, additives are added to mixture of base oil and ester oil and then the tackifier is added to form the lubricating oil composition disclosed therein. As further disclosed in Examples 1-3 of Culpon, sulfur and phosphorous-containing antiwear and extreme pressure gear oil additives are added to the lubricating oil composition. Therefore, Culpon would add sulfur and phosphorous-containing antiwear and extreme pressure gear oil additives to the lubricating oil composition disclosed therein. As such, the lubricating oil compositions of

Culpon are not within the scope of the lubricating oil compositions as presently recited in amended Claim 1. Since Culpon does not disclose a lubricating oil composition as presently recited in amended Claim 1, amended Claims 1-5 and 9-13 are believed to be not anticipated by Culpon.

There is likewise no appreciation in Culpon of forming a lubricating oil composition comprising, *inter alia*, "a minor deposit-inhibiting effective amount of at least one polyol ester of the general formula



wherein R^1, R^2 and R^3 are independently an aliphatic hydrocarbyl moiety have from 4 to 24 carbon atoms, R^4 is hydrogen or an aliphatic hydrocarbyl moiety having 1 to 10 carbon atoms and x, y and z are the same or different and are integers from 1 to 6; wherein the minor deposit-inhibiting effective amount of the polyol ester is about 1 wt. % to about 5 wt. %, based on the total weight of the composition and wherein the composition has a phosphorous content not exceeding 0.08% by weight, and a sulfur content not exceeding 0.2% by weight, based on the total weight of the composition."

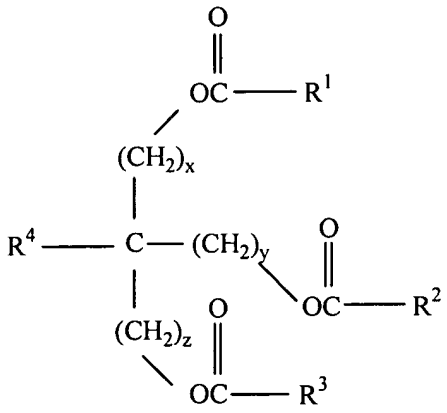
Rather, Culpon discloses a lubricating oil composition comprising (a) major portion of a synthetic base lubricating oil, (b) a solubilizer comprising a trimethylol propane ester of C_6 to

C_{12} carboxylic acids; and (c) 2 to 4 wt % of a tackifier comprising a polybutene polymer of molecular weight 100,000 to 1,000,000 and (d) additives such as sulfur and phosphorous-containing antiwear and extreme pressure gear oil additives. As stated above, the current low phosphorus and low sulfur requirements were not in existence at the time of filing the Culpon application. Therefore, even by employing a synthetic oil inherently free of sulfur, phosphorus and metals as disclosed in Culpon, Culpon would not have possibly contemplated a lubricating oil composition having any limits to the phosphorous and sulfur content therein and would have used additives containing high amounts of phosphorous and sulfur.

Instead, the primary goal of Culpon was to replace a mineral oil formulation with a synthetic oil formulation for chain and drive gear assemblies associated with ovens, furnaces, kilns and other hot equipment used in textile plants, heavy manufacturing, light manufacturing, wall board manufacturing, corrugated metal plants, paper mills and other manufacturing facilities. There is no suggestion or motivation in Culpon that a lubricating oil composition can be formed having a phosphorous content not exceeding 0.08% by weight, and a sulfur content not exceeding 0.2% by weight employing low levels of a specifically recited polyol ester with a major amount of a base oil of lubricating viscosity such that the lubricating oil compositions are more environmentally desirable than the higher phosphorous and sulfur content lubricating oil compositions generally used in *internal combustion engines* because they facilitate longer catalytic converter life and activity while also employing relatively low levels of the specifically recited polyol ester to provide high wear and deposit protection and oxidation-corrosion inhibition. Thus, nothing in Culpon would lead one skilled in the art to modify the lubricating oil compositions disclosed therein and arrive at the presently claimed lubricating oil composition

with any expectation of success. As such, amended Claim 1 is believed to be non-obvious, and therefore patentable, over Culpon.

With respect to new Claim 29, nowhere does Culpon disclose or suggest a lubricating oil composition *consisting essentially of* (a) a major amount of base oil of lubricating viscosity; (b) a minor deposit-inhibiting effective amount of at least one polyol ester of the general formula



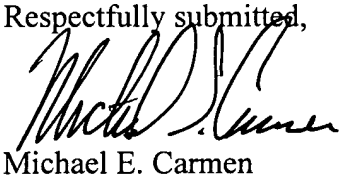
wherein R^1, R^2 and R^3 are independently an aliphatic hydrocarbyl moiety have from 4 to 24 carbon atoms, R^4 is hydrogen or an aliphatic hydrocarbyl moiety having 1 to 10 carbon atoms and x, y and z are the same or different and are integers from 1 to 6; and (c) at least one additive selected from the group consisting of a metal detergent, rust inhibitor, dehazer, demulsifier, metal deactivator, friction modifier, viscosity index improver, pour point depressant, antifoaming agent, co-solvent, package compatibiliser, metallic combustion improver, anti-knock compound, anti-icing additive, corrosion-inhibitor, ashless dispersant and dye, wherein the composition has a phosphorous content not exceeding 0.08% by weight and a sulfur content not exceeding 0.2% by weight, based on the total weight of the composition. By employing the transitional phrase "consisting essentially of" in a composition claim, the scope of the claim is limited to the specific ingredients recited in the claim and those that do not materially affect the basic and

novel characteristic(s) of the composition. *Atlas Powder Co. v. I.E. Du Pont De Nemours & Co.*, 750 F.2d 1569, 1573-74, 224 USPQ 409, 411 (Fed. Cir. 1984).

Culpon, in contrast thereto, discloses a lubricating oil composition containing *three essential components*: (1) major portion of a synthetic base lubricating oil, (2) a solubilizer comprising a trimethylol propane ester of C_6 to C_{12} carboxylic acids; and (3) 2to 4 wt % of a tackifier comprising a polybutene polymer of molecular weight 100,000 to 1,000,000. According to Culpon, the tackifier is added to the lubricating oil composition to allow the lubricant to cling to open surfaces and protect the entire assembly from rust and oxidation. Thus, Culpon's third component, i.e., the tackifier, unquestionably materially affects the basic and novel characteristics of his compositions by *absolutely* requiring the inclusion of the tackifier to allow the lubricant to cling to open surfaces. As such, new Claim 29 is believed to patentable over Culpon and allowance of new Claim 29 is respectfully requested.

For the foregoing reasons, amended Claims 1-5 and 9-12 and new Claim 29 as presented herein are believed to be in condition for allowance. Such early and favorable action is earnestly solicited.

Respectfully submitted,



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